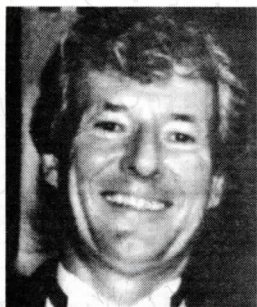


PECORA *thirteen*

Human Interactions With The Environment: Perspectives From Space

AWARD BANQUET PROGRAM

Wednesday, August 21, 1996



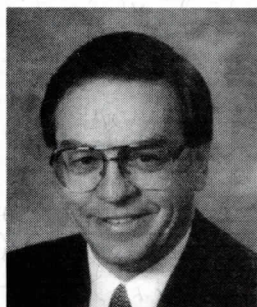
Dr. Crofton Bernard Farmer

The 1996 William T. Pecora Award is presented to Dr. Crofton Bernard Farmer in recognition of his outstanding achievements in the use of remote sensing for the scientific investigation of chemical processes leading to the depletion of stratospheric ozone.

Dr. Farmer is an internationally renowned atmospheric physicist who led the development of near-infrared Fourier Transform spectroscopy for highly sensitive atmospheric measurements. He was the first to detect stratospheric nitric oxide and to determine accurately the levels of reactive oxides of nitrogen in the stratosphere. In 1974, Dr. Farmer was awarded the first of three NASA Exceptional Scientific Achievement Medals for developing an instrument to measure simultaneously the concentrations of many neutral molecular species in the Earth's atmosphere.

For over 20 years, Dr. Farmer has provided insightful leadership in the NASA stratospheric measurements program, using instruments on unmanned stratospheric balloons. This program significantly contributed to understanding the ozone depletion phenomenon over Antarctica. In 1985, he made the most advanced measurement of the composition of the Earth's upper atmosphere when his Atmospheric Trace Molecule Spectroscopy (ATMOS) instrument flew on the Space Shuttle Spacelab 3. ATMOS obtained simultaneous spectra of 40 different atmospheric constituents, providing precise measurements of nearly all the important interacting species and their spatial and temporal variation so that the complex process of ozone depletion chemistry could be examined.

At the Jet Propulsion Laboratory and the California Institute of Technology, Dr. Farmer has been the Manager of the Atmosphere Research Section (1972-74), a Visiting Professor (1978-81), and a Senior Research Scientist (1984-89). Dr. Farmer is now a Distinguished Visiting Scientist and consultant at the Jet Propulsion Laboratory, California Institute of Technology.



Dr. M. Patrick McCormick

The 1996 William T. Pecora Award is presented to Dr. M. Patrick McCormick in recognition of his outstanding contributions to the pioneering advancements of both active and passive remote sensing of the Earth's atmosphere from space.

Dr. McCormick is an internationally recognized leader in the development and use of space-based remote sensing techniques to study the trace constituent chemical composition, aerosol loading, and cloud distributions of the Earth's troposphere and stratosphere. Through his leadership as the principal investigator of three important families of instruments—the Stratospheric Aerosol and Gas Experiment (SAGE), the Stratospheric Aerosol Measurement (SAM II), and the Lidar In-space Technology Experiment (LITE) – Dr.

McCormick has demonstrated the power of space-based remote sensing and its contributions to the understanding of both the climatology of atmospheric constituents and particulates, and the intimate roles that they play in the chemistry of ozone depletion. Dr. McCormick has played a key role in the development of active remote sensing of the atmosphere using lidar. For over two decades, he has worked with national and international collaborators to develop the theory and application of this emerging technology, making lidar a fundamental technique for observing the atmosphere.

Dr. McCormick, who is now affiliated with Hampton University, led the Aerosol Research Branch at the NASA Langley Research Center, which is actively involved in ground-, aircraft-, and space-based measurements in US and international programs. He serves the atmospheric community in many ways—as the Chairman of the International Coordination group on Laser Atmospheric Studies of the International Radiation Commission, Chairman of the Stratospheric Aerosols Committee of the International Global Atmospheric Chemistry Program, and a member of the National Academy of Sciences Panel on Aerosol Radiative Forcing and Climate.

WILLIAM T. PECORA AWARD BANQUET

Master of Ceremonies

Dr. Dallas Peck, USGS

Invocation

Reverend Howard W. Carroll

Dinner

Introduction of Guests

Featured Presentation

Mr. Al Schock,
Chairman of the Board, Nordica Enterprises, Inc.

Presentation of Pecora Awards

Doctor Crofton Bernard Farmer

Doctor M. Patrick McCormick

PREVIOUS RECIPIENTS OF THE WILLIAM T. PECORA AWARD

- 1974 William A. Fischer, U.S. Geological Survey, Department of the Interior (deceased)
- 1975 William Nordberg, National Aeronautics and Space Administration
Carlos Brockmann, Director of the LANDSAT-Bolivia Project
- 1976 Environmental Research Institute of Michigan
Laboratory for Applications of Remote Sensing of Purdue University
- 1977 Robert N. Colwell, University of California, Berkeley
Michael T. Halbouty, Consulting Geologist and Petroleum Engineer,
The Halbouty Center
- 1978 David S. Johnson, National Environmental Satellite Service,
Department of Commerce
- 1979 John M. DeNoyer, U. S. Geological Survey, Department of the Interior
Virginia T. Norwood, Senior Scientist, Hughes Aircraft Company
- 1980 Verner E. Suomi, University of Wisconsin
- 1981 Leonard Jaffe, National Aeronautics and Space Administration
James R. Anderson, (posthumously), U.S. Geological Survey,
Department of the Interior
- 1982 Alexander F. H. Goetz, National Aeronautics and Space Administration
Lawrence C. Rowan, U.S. Geological Survey, Department of the Interior
- 1983 Floyd F. Sabins, Jr., Senior Research Associate,
Chevron Oil Field Research Company
- 1984 Archibald B. Park, Consultant, Globex, Inc.
- 1985 Charles Elachi, National Aeronautics and Space Administration
- 1986 Allen H. Watkins, U.S. Geological Survey, Department of the Interior
- 1987 Francis P. Bretherton, National Center for Atmospheric Research
Vincent V. Salomonson, National Aeronautics and Space Administration
- 1988 William J. Campbell, U.S. Geological Survey,
Department of the Interior (deceased)
- 1989 Moustafa T. Chahine, National Aeronautics and Space Administration
- 1990 David A. Landgrebe, Laboratory for Applications of Remote Sensing
of Purdue University
- 1991 David S. Simonett (posthumously), University of California, Santa Barbara
- 1992 Shelby G. Tilford, National Aeronautics and Space Administration
- 1993 Ray D. Jackson, U.S. Department of Agriculture
- 1994 J. Robert Porter, Chairman of the Board and CEO, Earth Satellite Corporation
- 1995 Philip N. Slater, University of Arizona